

Appendix A: Prevention Research Centers Cost Analysis (PRC-CA) instrument elements

1. **Approach:** Like the PH ROI tool,¹⁰⁻¹² the PRC-CA instrument enables either prospective or retrospective cost data collection to give PRCs the flexibility to either individually collect each expense as it occurs or as aggregates collected on a monthly, quarterly, semi-annual, or annual basis. Like SASCAP,¹² we designed the PRC-CA instrument as a micro-costing tool. It allows the PRCs to report each resource used for the PRC core research project and the economic values of those resources as line items in the instrument.
2. **Perspective:** Data collected from the PRC-CA instrument can be used to estimate PRC core research project costs from a provider perspective, the PRC, by focusing on the PRC core research project implementation costs. It can also be used from a funder perspective, the CDC PRC Program, to estimate the cost of funding a core research project from its development (pre-implementation), to its implementation and effectiveness assessment (post-implementation).
3. **Time horizon:** Costs may be estimated on a one-year time horizon based on each year of the funding cycle, for example from September 30th, 2014 to September 29th, 2015; or on a five-year time horizon for the entire five-year funding cycle.
4. **Participant count:** Participants in PRC core research projects can be individuals and/or organizations. The participant count is the total number of individuals and/or organizations taking part in a PRC core research project.
5. **Measures:** The cost measures in the PRC-CA instrument are directly related to the PRC cost analysis indicator. It captures the dollars spent on labor, materials and consumables, travel, and location expenses associated with the PRC core research project – Table 1. Activities

associated with the cost measures are assigned to specific PRC core research project phases. **Pre-implementation phase** is the period that might include the design, development, or formative research process of the PRC core research project. **The implementation phase** is the period when the PRC core research project is put into effect, executed or delivered. This phase might include participant recruitment, community engagement, or training. **The post-implementation phase** is the period after the delivery of the PRC core research project. This phase might include data analysis, dissemination of findings, or translation to practice or policy.

Number of units is the total number of each resource listed as a line item in the PRC-CA instrument; and **cost per unit** is the cost of a listed line item. For each cost measure, the number of units and cost per unit of each resource used and reported in the PRC-CA instrument are identified. For example, if the researcher used pedometers and spent \$2,000 for 100 pedometers, then the cost per pedometer was \$20. Cost per unit could help someone who is considering implementation of the PRC core research project decide whether they have the resources to do so.

Each cost measure is also associated with a pay category. The **pay category** indicates funding sources or types for each line items reported in the PRC-CA instrument – Table 1.

Some line items might be provided in-kind or on a volunteer basis. To complete a cost analysis, all the line items need to be monetized; designating the pay category allows a monetary estimation of goods and services provided in-kind or on a voluntary basis. For services without specifically designated costs, the literature informed what costs to use for monetization. For example, if a PRC is unable to provide labor cost for volunteers, median

hourly wages for occupations like the occupations of the volunteers are obtained from the United States Bureau of Labor Statistics and used as estimated costs. Another example is if travel costs are not available, federal per diem rates for described travel locations are used. For labor, the pay category options are PRC Paid, In-Kind and Volunteer. For the materials and consumables, travel and location, the pay category options are PRC Paid and In-Kind. The distinction between PRC Paid and non-PRC Paid (In-kind or volunteer) enables cost estimations from a provider perspective (a PRC) and a funder perspective (the PRC Program), as previously discussed.

6. **Analytic approach:** Data obtained from the PRC-CA instrument may be used to aggregate PRC Program level average costs per PRC (e.g. average core research project pre-implementation cost per PRC), PRC specific average cost per participant (e.g. labor cost per participant), and/or total PRC core research project per participant.

Sensitivity analyses may be useful for estimating costs in communities or population other than the one originally studied. For example, if a PRC core research project was to be implemented in a city, implementation costs may be estimated based on a 10%, 50%, and 90% reach with the city's population to generate cost estimate ranges.

7. **Respondent selection:** We recommended the data collection and input be conducted by a PRC faculty or staff member knowledgeable about resource use and costs within the PRC, such as a financial manager or a program evaluator.